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ABSTRACT

A sputtering target comprising a substrate and a target material formed on the substrate, wherein the target material comprises a metal oxide of the chemical formula MO_x as the main component, wherein MO_x is a metal oxide which is deficient in oxygen as compared with the stoichiometric composition, and M is at least one metal selected from the group consisting of Ti, Nb, Ta, Mo, W, Zr and Hf, a process for its production, and a method for forming a film having a high refractive index.